UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,036	10/29/2008	Jean-Michel Combe	200207060-3	9253

22879 7590 05/11/2011

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
3404 E. Harmony Road
Mail Stop 35
FORT COLLINS, CO 80528

EXAMINER	
DAVIS, TONY O	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
05/11/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
laura.m.clark@hp.com

Office Action Summary	Application No.	Applicant(s)	
	10/587,036	COMBE, JEAN-MICHEL	
	Examiner	Art Unit	
	TONY DAVIS	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/24/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1-2, 4-20 are rejected under 35 U.S.C. 103(a)** as being unpatentable over **Tokunaga et al. (US 2004/0160430)**, hereinafter referred to as Tokunaga.

Regarding claim 13, Tokunaga teaches A digital pen (electronic pen 101 of fig 1-2) adapted for use with a page (paper 102 of fig 1-2) of position-determining pattern (paragraph 5 and 30, fig 1-2), the pen having: a (207 of fig 2) memory (paragraph 6, fig 2); a pattern position capturer (camera 203 of fig 2) adapted to capture data relating to the position of the pen in relation to a said pattern and to store pen position data in a memory (paragraph 6, fig 2); and wherein the pen has a processor (processor 206 of fig 2) having software adapted to associate time signals with the pen position data and to evaluate pen position with time to determine when a user has finished marking a first physical page and begins marking a second physical page having the same pattern, and to either: (i) create a page end marker in the pen-captured data; or (ii) store pen-acquired data from different physical pages, each having the same pattern, in different electronic files in the memory of the pen. **Tokunaga fails to teach or suggest** A digital

pen having: a clock adapted to produce time signals; and wherein the pen has a processor having software adapted to associate time signals with the pen position data and to evaluate pen position with time to determine when a user has finished marking a first physical page and begins marking a second physical page having the same pattern, and to either: (i) create a page end marker in the pen-captured data; or (ii) store pen-acquired data from different physical pages, each having the same pattern, in different electronic files in the memory of the pen.

However, Tokunaga teaches A computer having: a clock (via schedule management Table 114 of fig 6) adapted to produce time (date in year/month column of fig 6) signals (paragraph 32, fig 6 and 1); and wherein the computer has a processor having software (schedule management table 114 of fig 1 and 6 and use purpose definition table 113 of fig 5 and 1) adapted to associate time signals (date in year/month exhibited in fig 5-6) with the pen position (dot pattern to be identified exhibited in fig 5 or coordinate string data exhibited in fig 6) data (paragraph 32 and 35, fig 5-6) and to evaluate pen position (via document identifying means 118 of fig 1) with time to determine when a user has finished marking a first physical page and begins marking a second physical page having the same pattern (paragraph 59, 36, and 56, fig 1 and 12), and to either: (i) create a page end marker in the pen-captured data; or (ii) store pen-acquired data from different physical pages, each having the same pattern, in different electronic files in the memory of the (storage unit 109 of fig 1) computer (paragraph 60, 43, 63, and 56, fig 1 and 12) .

Tokunaga teaches the claimed invention except **A digital pen** having: a clock adapted to produce time signals; and wherein the pen has a processor having software adapted to associate time signals with the pen position data and to evaluate pen position with time to determine when a user has finished marking a first physical page and begins marking a second physical page having the same pattern, and to either: (i) create a page end marker in the pen-captured data; or (ii) store pen-acquired data from different physical pages, each having the same pattern, in different electronic files in the memory of the pen. Tokunaga teaches it is well known in the art to one of ordinary skill in the art at the time of the invention A computer having: a clock adapted to produce time signals; and wherein the computer has a processor having software adapted to associate time signals with the pen position data and to evaluate pen position with time to determine when a user has finished marking a first physical page and begins marking a second physical page having the same pattern, and to either: (i) create a page end marker in the pen-captured data; or (ii) store pen-acquired data from different physical pages, each having the same pattern, in different electronic files in the memory of the computer.

Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the digital pen as taught by Tokunaga by incorporating the computer tables and storage unit as taught by Tokunaga through routine work in the art

Regarding claim 1, it is rejected for the same rationale as the rejection of claim 13; it is the method claim of the apparatus of claim 13, and the apparatus is capable of performing the claimed method.

Regarding claim 14, Tokunaga teaches A pen according to claim 13 wherein the processor has software adapted to store pen-acquired data in a first memory (memory 207 of fig 2) of the pen and to transfer the data to a file in a second, protected, memory (storage unit 109 of fig 1) of the pen upon the determination of a page end (paragraph 57 and 61, fig 1 and 12).

Regarding claim 6, it is rejected for the same rationale as the rejection of claim 14.

Regarding claim 15, Tokunaga teaches A pen according to claim 14 wherein the processor has software adapted to erase the first memory pursuant to transfer of pen-acquired data previously stored there to the protected memory (paragraph 57, fig 1).

Regarding claim 5, it is rejected for the same rationale as the rejection of claim 15.

Regarding claim 16, Tokunaga teaches A pen according to claim 13 in which the processor has software adapted to cause the pen-acquired data relating to successive physical pages, each having the same pattern, to be stored in either: (i) the same file in memory; or (ii) different respective files, one per physical page, in (storage unit 109 or layout display means 115 both of fig 1) memory (paragraph 63, fig 1 and 12).

Regarding claim 17, Tokunaga teaches A pen according to claim 14 in which the processor has software adapted to cause the pen-acquired data relating to successive physical pages, each having the same pattern, to be stored in either: (i) the same file in memory; or (ii) different respective files, one per physical page, in memory (paragraph 63, fig 1 and 12).

Regarding claim 18, Tokunaga teaches A pen according to Claim 15 in which the processor has software adapted to cause the pen-acquired data relating to successive physical pages, each having the same pattern, to be stored in either: (i) the same file in memory; or (ii) different respective files, one per physical page, in memory (paragraph 63, fig 1 and 12).

Regarding claim 19, Tokunaga teaches Software, optionally encoded upon a machine-readable storage medium, which when executed upon a processor causes the processor to: (i) receive a first signal, indicative of the position of a pen upon a first piece of physical media having printed thereupon a position location pattern that is common with a second piece of physical media (paragraph 56, 52, and 61, fig 1 and 12); (ii) receive a second signal indicative of strokes, and the location of said strokes, of the pen upon the second piece of physical media (paragraph 56, 52, and 61, fig 1 and 12); and (iii) use the first and second signals to produce a digital document media (paragraph 56, 52, and 61, fig 1 and 12).

Regarding claim 2, Tokunaga teaches The method of claim 1 wherein the first and second pieces of physical media are sheets or pages (paper 102 of fig 1), and which method further comprises creating a page division marker (Layout A, B, or C

boundaries indicated in fig 9 and 12) in pen-acquired data by making a gesture with the pen upon the first page of physical media indicative of termination
of use of the first page of a document (paragraph 42 and 61, fig 1, 9, and 12).

Regarding claim 4, Tokunaga teaches The method of claim 2 comprising using a processor to identify the marker and closing a first file in memory associated with the first page or document pursuant to recognition of the page or document division marker (paragraph 61, fig 12).

Regarding claim 7, Tokunaga teaches The method of claim 6 wherein the protected memory is in the pen (paragraph 6, fig 2)

Regarding claim 8, Tokunaga teaches The method of claim 6 comprising clearing the short term memory before the commencement of step (iii) (paragraph 57, fig 1).

Regarding claim 9, Tokunaga teaches The method of claim 1 comprising associating a time stamp with the position of the pen relative to the pattern (paragraph 61).

Regarding claim 10, Tokunaga teaches The method of claim 9 wherein step (iv) comprises arranging the data stored in steps (ii) and (iii) in order of the time stamp 9paragraph 57).

Regarding claim 11, Tokunaga teaches The method of claim 1 comprising partitioning pen-acquired data into different files prior to transmitting the data off-pen (paragraph 57 and 61).

Regarding claim 12, Tokunaga teaches The method of claim 1 comprising transferring the data stored in steps (ii) and (iii) to a remote, off-pen, processor unit prior to step (iv) (paragraph 30, fig 1).

Regarding claim 20, Tokunaga teaches Software according to claim 19 which causes the processor to separate data derived from the first and second signals into separate memory files (paragraph 63, fig 1 and 12).

3. **Claim 3 is rejected under 35 U.S.C. 103(a)** as being unpatentable over **Tokunaga** as applied to claim 1 above, **and further in view of Furukawa et al. (US 2005/0093832),** hereinafter referred to as Furukawa.

Regarding claim 3, Tokunaga teaches The method of claim 1 wherein the first and second pieces of physical media are sheets or pages. **However, Tokunaga fails to teach** creating an end of electronic document division marker in pen-acquired data by making a gesture with the pen upon a page, the gesture coding for an end of electronic document signal.

Furukawa teaches creating an end of electronic document division marker (confirmation box 320 of fig 3) in pen-acquired data by making a gesture with the pen upon a page, the gesture coding for an end of electronic document signal (paragraph 52, fig 3).

Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Tokunaga by incorporating the teachings of Furukawa for the purpose of clearly identifying functions of the digital pen and paper.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONY DAVIS whose telephone number is (571)270-5586. The examiner can normally be reached on M-Th 7:30 a.m.-6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quan-Zhen Wang can be reached on 571-272-3114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D./
Examiner, Art Unit 2629

/Quan-Zhen Wang/
Supervisory Patent Examiner, Art Unit 2629